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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,999	11/15/2006	William Stringfellow	AGC.P.US0001	9142

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EXAMINER

BROWN, COURTNEY A

ART UNIT	PAPER NUMBER
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1616

MAIL DATE	DELIVERY MODE
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12/11/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/560,999	STRINGFELLOW, WILLIAM	
	Examiner	Art Unit	
	Courtney A. Brown	1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/01/2007 and 11/05/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

This application is a 371 of PCT/US04/19847. Priority to Provisional Applications 60/482,224 and 60/493,622 filed on August 8, 2003 is acknowledged.

Status of the Claims

Applicant's claims are drawn toward a fungicidal composition for through bark application to woody plants.

Claims 1- 22 filed on December 16,2005 are currently pending examination for patentability.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riego et al. (US 6,040,272) in view of Lucas (US 5,665,672), and further in view of Zobrist et al. (US 2,947,111).

Applicant's Invention

Applicant claims a method for applying a fungicide to a tree comprising applying a fungicide composition to the bark periderm of woody plants without mechanically penetrating or piercing the bark of the plant. The fungicide composition comprises: (a). a systemic fungicide which includes a phosphite compound that includes monoester phosphorous acids that is from about 10% to about 30% by weight phosphite; (b). a polyoxyethylene heptamethyl trisiloxane surfactant that is from about 0.003 to 0.05 parts by weight per part of systemic fungicide; and (c). water. Applicant additionally claims the composition as stated above comprising these optional components: (d). a surface active agent such as propylene glycol that is from about 0.0001 to 2 parts by weight; and (e). solvents selected from the group consisting of alcohols, glycols, and glycol esters. Applicant also claims a method for applying a fungicide to a tree comprising spraying the systemic fungicide composition on the bark periderm (which consist that portion between the root flare and the first branch) 50-75 grams of systemic fungicide to six feet of a tree, measured from the base, where the face has a diameter breast height of about six inches and 25-125 grams of the systemic fungicide composition to

six feet of a tree, measured from the base where the tree has a diameter breast height of about six inches to where it will run off the bark.

Determination of the scope and the content of the prior art

(MPEP 2141.01)

Riego et al. disclose a herbicidal composition applied to bark in basal (bark periderm) and dormant stem regions of plants (abstract). Riego et al. disclose a composition that preferably comprises about 5-35% by weight polyoxyethylene heptamethyl trisiloxanes (column 3, lines 6-8 and column 5, line 33); 50-95% of a glycol or glycol ester such as diethylene glycol and propylene glycol (column 3, lines 22-25 and column 5, lines 50-52), and "pour point depressants" (solvents) such as methanol, ethanol, and n-propanol (column 7, lines 46-52). Riego et al. teach that the composition could be applied to the bark of basal stem portions of plants (bark periderm) employing backpack sprayers (column 7, lines 45-52 and column 8, lines 3-5). Additionally, in column 8, lines 49-52, Riego et al. teach applying the composition to the bark from the waist or knee height to ground level, and applying sufficient solution to wet the bark to the point of run-off.

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Riego et al. do not disclose the use of a systemic fungicide which includes a phosphite compound that includes monoester phosphorous acids in the composition.

Lucas teach a fungicidal composition that comprises a monoester salt of a phosphorous acid that is one part by weight (preferably aluminum ethyl phosphite) and an ethylene bisdithiocarbamate contact fungicide that is two parts by weight (see abstract). Additionally, Lucas teaches the use of a support such as a surfactant, and fluid such as water or alcohols in the composition (column 2, lines 55-67) and applying the composition by spraying a liquid formulation (column 4, lines 37-41). Zobrist et al. teach the use of liquid systemic fungicides and the spray application to trees (column 1, lines 27-35).

Finding of prima facie obviousness

Rationale and Motivation (MPEP 2142-2143)

It would have been obvious to a person having ordinary skill in the art at the time of the invention was made to combine the teachings of Riego et al., Lucas, and Zobrist et al. to devise a method for applying a fungicide to a tree comprising applying a fungicide composition to the bark periderm of woody plants without mechanically penetrating or piercing the bark of the plant. One would be motivated to combine these teachings because the compositions are similar (active compound, surfactant, water

and other solvents). The addition of a monoester salt of a phosphorous acid improves the effectiveness of the fungicide by increasing its persistence or to complete the range of activity (Lucas, column 2, lines 39-59). Using a systemic fungicide allows the bark of the tree to completely absorb the composition. It would be prima facie obvious to combine these compositions each of which is taught by the prior art to be useful for the same purpose in order to form a third composition that is to be used for the very same purpose; the idea of combining them flows logically from their having been individually taught in prior art." In re Kerkhoven 206 USPQ 1069, 1073. Thus, combining Riego et al., Lucas and Zobrist et al. as claimed in the instant invention, sets forth prima facie obvious subject matter

Additionally, it is routine optimization for one of ordinary skill in the art to adjust the amount of ingredients to optimize the desired results. In this case the weight percent ranges of the components of the composition and the application to the tree (to six feet of a tree, measured from the base, where the tree has a diameter breast height of about six inches) are routine optimization.

Conclusion

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR

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Only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electron Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Courtney Brown, whose telephone number is 571-270-3284. The examiner can normally be reached on Monday-Friday from 8 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



SHELLEY A. DODSON
PRIMARY EXAMINER

Courtney A. Brown

